

## VORIEK<sup>®</sup>

## Advantages





## **Advantages Over Thermal Dispersion**

Primary measurement  Primary measurement  Primary measurement  Primary are stable over time  Primary measurement		VorTek	Thermal Dispersion
Sensors are stable over time  V  X  Severy sensor has the same output  V  X  Sensor has a linear output  V  X  Sensor has a linear output  V  X  Sensor loss a linear output  V  X  Sensor loss immune to changes in humidity  V  X  Sensor is immune to changes in humidity  V  X  X  X  X  X  X  X  X  X  X  X  X	Measurement Theory		
Every sensor has the same output  V  X  Every sensor has a linear output  V  X  Fire digital measurement  V  X  Sensor/Probes  Sensor/Probes  Sensor is immune to changes in humidity  V  X  Operiodic calibration requirement  V  X  Sensor does NOT require periodic cleaning  V  X  Sonsor does NOT require periodic cleaning  V  X  Non proprietary Ry45 cable  V  X  Sonsor ost sensor/probe replacement  V  X  Sonsor does not cable replacement  V  X  Sonsor does replacement  V  X  Calibration  NIST traceable standards on entire line  Selectronics  Wilcroprocessor technology  V  V  Selectronics  Wilcroprocessor technology  V  V  Sonson Port require high performance A/D converter  V  X  Sonsop over requirements  V  X  Sonsop over requi	Primary measurement	<b>✓</b>	×
Fire digital measurement  V  Sensor/Pobes  Sensor is immune to changes in humidity  V  Sensor does NOT require periodic cleaning  V  Son NOT periodic calibration requirement  Sensor does NOT require periodic cleaning  V  Son proprietary RJ45 cable  V  Son proprietary RJ45 cable  V  Son proprietary RJ45 cable  V  Son cost caslo replacement	Sensors are stable over time	<b>✓</b>	×
Frue digital measurement  Frue digital meanure to changes in humidity  Frue calibration requirement  Frue digital technology instead of analog  Frue digital technology frue digital technology  Frue digital measurement  Frue digi	Every sensor has the same output	<b>✓</b>	*
Sensor/Probes  Sensor is immune to changes in humidity  V  X  NO periodic calibration requirement  V  X  Sensor does NOT require periodic cleaning  V  X  Significal technology instead of analog  V  X  Non proprietary Rj45 cable  Low cost sensor/probe replacement  V  X  Sensor construction  V  X  Calibration  NIST traceable standards on entire line  Selectronics  Wificroprocessor technology  V  V  Selectronics  Wificroprocessor technology  V  V  Simple field airflow calibration  NO complex curve matching is required  V  Modular Design  Dne Electronics footprint  V  X  Modular Design  Dne Electronics footprint  V  X  Selectronics field add for sensors  Poles RACet  V  X  Simple field airflow calibration  Simp	Every sensor has a linear output	✓	*
Sensor is immune to changes in humidity  NO periodic calibration requirement  NO periodic calibration requirement  NO periodic calibration requirement  NO periodic calibration require periodic cleaning  Non proprietary RJ45 cable  Non proprietary RJ45 cable  NO cost sensor/probe replacement  NO complex construction  NO Complex curve matching is required  NO ST Traceable standards on entire line  NO Complex curve matching is required  NO Comple	True digital measurement	<b>✓</b>	×
NO periodic calibration requirement  V  Sensor does NOT require periodic cleaning  V  Non proprietary RJ45 cable  Low cost sensor/probe replacement  V  Simple probe sensor construction  V  Calibration  NIST traceable standards on entire line  Electronics  Wicroprocessor technology  V  V  Coes NOT require high performance A/D converter  Low power requirements  V  X  X  X  X  X  X  X  X  X  X  X  X	Sensor/Probes		
Sensor does NOT require periodic cleaning  Pigital technology instead of analog  Non proprietary RJ45 cable  Now cost sensor/probe replacement  Now cost sensor/probe replacement  Now cost sensor/probe replacement  Now cost cable replacement  Now complex curve matching is required  Now	Sensor is immune to changes in humidity	<b>✓</b>	*
Digital technology instead of analog  Non proprietary RJ45 cable  Low cost sensor/probe replacement  Low cost sensor/probe replacement  Low cost cable replacement  Low construction  Low cost cable replacement  Low construction  Low cost cable replacement  Low cable replacement  Low cost cable replacement  Low cost cable replacement  Low cost cable replacement  Low cable replacement  Low cost cable replacement  Low cost cable replacement  Low cable	NO periodic calibration requirement	<b>✓</b>	*
Non proprietary RJ45 cable  Low cost sensor/probe replacement  Low cost sensor/probe replacement  Low cost cable replacement  Low callibration  Los compower requirements  Low power requirements  Low pow	Sensor does NOT require periodic cleaning	<b>✓</b>	*
Low cost sensor/probe replacement  Low cost cable replacement  Low cable  Low cost cable sensor construction  Low cost cable sensor construction  Low cost cable standards on entire line  Low cable standards on	Digital technology instead of analog	✓	×
Low cost cable replacement  Low cash care interchangable  Low cash cash cash cash cash cash cash cash	Non proprietary RJ45 cable	<b>✓</b>	×
Simple probe sensor construction  Probes are interchangable  Calibration  NIST traceable standards on entire line  V  SElectronics  Microprocessor technology  Microprocessor technolog	Low cost sensor/probe replacement	✓	×
Probes are interchangable  Calibration  NIST traceable standards on entire line  Electronics  Microprocessor technology  Field upgradable firmware  Obes NOT require high performance A/D converter  Ow power requirements  NO complex curve matching is required  NO complex curve matching is req	Low cost cable replacement	<b>✓</b>	×
Calibration  NIST traceable standards on entire line	Simple probe sensor construction	✓	×
Ricctronics  Microprocessor technology Micro	Probes are interchangable	<b>V</b>	×
Electronics  Microprocessor technology  Micropro	Calibration		
Microprocessor technology  Field upgradable firmware  Does NOT require high performance A/D converter  Low power requirements  NO complex curve matching is required  Modular Design  Done Electronics Platform for any sensor density  Field add for BACnet  V  Sield add for sensors  Field add for remote display  V  Ser Interface  Free intuitive graphical user interface  Does NOT use antiquated decision tree for field setup  No service display is optional  V  Remote display is optional	NIST traceable standards on entire line	<b>V</b>	×
Field upgradable firmware  Pooes NOT require high performance A/D converter  Low power requirements  Low power requirements  Poonuments  P	Electronics		
Does NOT require high performance A/D converter  Low power requirements  V  Simple field airflow calibration  V  NO complex curve matching is required  V  Modular Design  One Electronics Platform for any sensor density  Field add for BACnet  V  X  Similated add for sensors  V  Sield add for remote display  V  Ser Interface  Free intuitive graphical user interface  Does NOT use antiquated decision tree for field setup  V  Remote display is optional  X  X  X  X  X  X  X  X  X  X  X  X  X	Microprocessor technology	<b>✓</b>	<b>✓</b>
Low power requirements  Simple field airflow calibration  V  NO complex curve matching is required  V  Small electronics footprint  W  Modular Design  One Electronics Platform for any sensor density  Field add for BACnet  V  Similar field add for remote display  V  Similar field add for sensors  V  Similar field add for remote display  V  Ser Interface  Fire intuitive graphical user interface  Oces NOT use antiquated decision tree for field setup  V  Remote display is optional  V  Sermote display is optional	Field upgradable firmware	✓	<b>✓</b>
Simple field airflow calibration  NO complex curve matching is required  NO complex curve matchi	Does NOT require high performance A/D converter	<b>✓</b>	*
NO complex curve matching is required  Modular Design  One Electronics Platform for any sensor density  Field add for BACnet  Field add for sensors  Field add for remote display  User Interface  Free intuitive graphical user interface  Coos NOT use antiquated decision tree for field setup  Remote display is optional  Remote display is optional	Low power requirements	✓	*
Modular Design One Electronics Platform for any sensor density Field add for BACnet Field add for sensors Field add for remote display  User Interface Free intuitive graphical user interface Free intuitive graphical user interface  Does NOT use antiquated decision tree for field setup  Remote display is optional  Remote display is optional	Simple field airflow calibration	<b>✓</b>	*
Modular Design  One Electronics Platform for any sensor density  Field add for BACnet  Field add for sensors  Field add for remote display  User Interface  Free intuitive graphical user interface  Ooes NOT use antiquated decision tree for field setup  Display is optional  Remote display is optional	NO complex curve matching is required	✓	*
One Electronics Platform for any sensor density  Field add for BACnet  Field add for sensors  Field add for remote display	Small electronics footprint	<b>✓</b>	×
Field add for BACnet  Field add for sensors  Field add for remote display	Modular Design		
Field add for sensors  Field add for remote display  V  Ser Interface  Free intuitive graphical user interface  Coes NOT use antiquated decision tree for field setup  Display is optional  Remote display is optional  V  Service interface  V  Service interface  V  Service interface  V  Service interface  V  Service intuitive graphical user interface  V  Service interface  Service interface interface  Service interface  Service interface interface  Service interface interf	One Electronics Platform for any sensor density	<b>✓</b>	*
User Interface Free intuitive graphical user interface  Coes NOT use antiquated decision tree for field setup  Display is optional  Remote display is optional  ✓  ★  ★  ★  ★  ★  ★  ★  ★  ★  ★  ★  ★	Field add for BACnet	<b>✓</b>	×
User Interface Free intuitive graphical user interface  Coes NOT use antiquated decision tree for field setup  Display is optional  Remote display is optional  **  **  **  **  **  **  **  **  **	Field add for sensors	<b>✓</b>	×
Free intuitive graphical user interface  Does NOT use antiquated decision tree for field setup  Display is optional  Remote display is optional  **  **  **  **  **  **  **  **  **	Field add for remote display	<b>V</b>	×
Does NOT use antiquated decision tree for field setup  ✓  Semote display is optional  ✓  **  **  **  **  **  **  **  **  **	User Interface		
Display is optional   Remote display is optional   **  **  **  **  **  **  **  **  **	Free intuitive graphical user interface	<b>✓</b>	×
Remote display is optional	Does NOT use antiquated decision tree for field setup	<b>✓</b>	×
	Display is optional	<b>✓</b>	×
Display is NOT required for setup	Remote display is optional	<b>✓</b>	×
	Display is NOT required for setup	<b>✓</b>	×





## Advantages Over Velocity Pressure

	VorTek	Pitot	Piezo Ring
Measurement Theory			
Primary measurement	<b>V</b>	V	<b>✓</b>
Sensors are stable over time	<b>✓</b>	<b>✓</b>	<b>✓</b>
Every sensor has the same output	<b>✓</b>	<b>✓</b>	×
Every sensor has a linear output	<b>✓</b>	×	×
Sensor/Probes			
Independent multipoint velocity averaging	<b>✓</b>	×	×
High turndown	<b>✓</b>	×	×
Sensor is NOT affected by changes in humidity	<b>✓</b>	×	×
NO periodic calibration requirement	<b>✓</b>	×	×
Sensor does NOT require periodic cleaning	<b>✓</b>	×	×
Simple cable	<b>✓</b>	×	×
Calibration			
NIST traceable standards on entire line	<b>✓</b>	×	×
Sensor/Transmitter tested as a unit	<b>✓</b>	×	×
Sensor/Transmitter NIST as unit	<b>✓</b>	×	×
Electronics			
Microprocessor technology	<b>V</b>	×	×
Field upgradable firmware	<b>✓</b>	×	×
Does NOT require high performance A/D converter	<b>✓</b>	×	×
Low power requirements	<b>✓</b>	<b>V</b>	<b>✓</b>
Simple field airflow calibration	<b>✓</b>	×	×
Transmitter drift free	<b>✓</b>	×	×
Linear airflow output	<b>V</b>	×	×
Modular Design			
One electronics platform for any sensor density	<b>✓</b>	×	×
Field add for BACnet	<b>✓</b>	×	×
Field add for sensors	<b>✓</b>	×	×
Field add for remote display	<b>✓</b>	×	×
User Interface			
Free intuitive graphical user interface	<b>V</b>	×	×
Display is optional	<b>✓</b>	×	×